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KNOWLEDGE AND EXECUTION OPEN SOURCE SOFTWARES AMONGST LIBRARY PROFESSIONALS OF POLYTECHNIC COLLEGES IN TAMILNADU: A STUDY

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ABSTRACT

At this moment the Libraries have been completely reliant on providing narrative services to its users based on computer applications. Different computer programs are available for libraries to provide range of services from library automation, creating library websites, knowledge management, and creating digital library to document editing. To manage huge amount of digital information, libraries need some computer applications which takes care of their requirements. The purpose of this paper is to assess and evaluate the awareness and implementation of OPEN SOURCE SOFTWARE (OSS) by the LIS professionals working in various Polytechnic colleges in Tamilnadu. The study is based on survey method and questionnaire technique was used for collection data from the respondents. The study finds that although the LIS professionals of Polytechnic colleges in Tamilnadu have knowledge on (OSS), their uses in libraries are in budding stage. Suggest that for the widespread use of (OSS) in Polytechnic college libraries, a cooperative and participatory organizational system, positive attitude of authorities and LIS professionals, and proper training provision for LIS professional need to be developed.

Keywords: Digital library, Open source software, Library professionals, Library Automation, Polytechnic Colleges, library services.

INTRODUCTION

Information and communications technology (ICT) is a drone word in field of library and information science today. ICT has been trained and discussed at a great length of the library as well as in field of library professionals' community. One of the main reasons given by the library community to use viable software is 'support' to provided by the commercial vendors. It is observed that many times the annual maintenance charges of the software's are paid, still the commercial vendors lack of providing proper support for libraries which include support for insulation /updating of the software, solving any issued while using the software, providing new features in the software, import/export/migration of data in standard library format for future preservation, easy documentation manuals, data entry support with library standards, interoperability support of data for exchange between libraries, etc. "The OSS offers libraries an attractive solution. Library end users with technical and nontechnical skills can participate in OSS installation and maintenance, librarians can engage in OSS development and modifications, and library user groups can often customize OSS environments. Moreover, OSS is an important library solution, for there exists a large use-base for OSS applications, a wide variety of available OSS tools, and a multitude of OSS support channels"¹ Source Forge provides a platform for the developers to create powerful software. Currently, it is hosting 3, 24,000 projects with more than 46 million users who are using these software and there are more than 4, 00,000 downloads a day².

The concepts on OSS that it is absolutely free seem to be impractical. Although unlike commercial software there is no initial purchase fees or license fees or upgrade fees, but it requires an investment of time and effort by users like other commercial software. The benefits of OSS are compelling libraries towards the use of OSS software and many libraries have an

implemented this software for various purposes more specifically for automation, creation of digital library, institutional repositories, etc.

The paper is an effort to make a study on the awareness and implementation of OSS by the LIS professionals of Polytechnic colleges in Tamilnadu.

LITERATURE REVIEW

A good number of OSS, its history and case studies in libraries have been carried out by students, research scholars, and teachers of various institutions all over the world. Giri & Sengar³ in their paper have given an insight into the practical implementation aspects of OSS for managing the activities and services of a library. They have notified that the main pre-requisite of OSS use in libraries is the librarian's potentiality to harness the staff motivation in a positive way.

The OSS is a collaborative programming development which releases its source code freely to the general public for any use, modifications and redistribution without any licensing restrictions. The source code refers to instructions written by humans in a computer programming language to be compiled into a binary format that can run on a computer, carrying out the tasks outlined in the source code⁴.

Bissels⁵ talked about OSS installation at the Royal London Homeopathic Hospital (RLHH) and described the transition to the Koha 3.0 library management system (LMS) as the library's primary information access framework. He has stated that Koha, an open source ILS, fulfilled the needs and goals of a specialized medical library institution. Biswas & Paul⁶ in their study have made an evaluation of DSpace and GSDL. They have attempted to identify the extent of adoption of open source digital library software packages in various organizations through an online survey. Sunil kumar satpathy and Rabindra K. Maharana⁷ studied the LIS

professionals of engineering college of Odisha have knowledge on OSS, their uses in libraries are in budding stage and suggested that a cooperative and participatory organisational system, positive attitude of authorities and LIS professionals, proper training provision for LIS professionals.

OBJECTIVES

The objective of the study is to know the awareness and implementation of OSS among the LIS professionals working in Polytechnic colleges in Tamilnadu. However the other objectives of the study are to:

- Find out the various types of OSS skills passionated by the LIS professionals working in polytechnic colleges in tamilnadu.
- Assess the application of OSS by LIS professionals in polytechnic libraries
- Identify the causes of low level use of OSS by LIS professionals

SCOPE AND LIMITATIONS OF STUDY

The scope of the study covers the use and implementation of OSS by the LIS professionals working in polytechnic colleges in Tamilnadu. However, the study has following limitations;

- The study is covered to Tamilnadu state only.
- The study includes only the polytechnic colleges (government, government aided and self-finance) in tamilnadu, which are affiliated under DOTE and approved by AICTE.
- The study covers only LIS professionals and not any other category of staff of Polytechnic colleges. Among various aspects of LIS professionals, the study is limited to awareness and use of OSS only.

METHODOLOGY

This study is based on survey (questionnaire) method. A structured questionnaire was planned and dispersed to collect data from the LIS professionals of Polytechnic colleges of Tamil Nadu. In addition, personal interviews were also conducted with library and information science professionals and experts to assess the problems related to use of OSS.

DATA ANALYSIS

The questionnaires were dispersed to 97 LIS professionals, out of which 82 filled-in questionnaires (84.53 %) were collected. The data collected through the questionnaires was scrutinized, classified, and tabulated for better understanding and clarity. To make the data analysis has been used for various statistical techniques.

LIS PROFESSIONALS

The qualification, experience, designation were taken and the present study data have been tabulated in table 1.

Table 1. Designation, qualification and experience of Library Professionals in Polytechnic colleges

Professionals	No.of respondents	percentage
Designation		
Librarian	54	65.85%
Lib.Incharge	18	21.95%
Lib.Asst	10	12.19%
Total	82	
Qualification		
PhD	06	7.03%
MPhil	27	32.92%
MLIS	46	56.09%
BLIS	03	3.65%
Total	82	
Experience		
1-5yrs	36	43.90%
5-10yrs	18	21.95%
10-15yrs	23	28.04%
More than 15yrs	5	6.09%
Total	82	

Analysis of data showed table 1 designation of respondents that out of 82 replied, 54 (65.85%) are librarian, 18 (21.95%) are library in charge, 10(12.19%) are of Lib.Asst. Professional qualification of respondents, the data analysis shows that as high as 46 (56.09%) respondents out of 216 have MLIS qualifications.

AWARENESS OF LIBRARY AUTOMATION OPEN SOURCE SOFTWARES

Automation and networking has become the essential need for libraries and many libraries are adopting OSS for computerized libraries due to several advantages associated with this. Realizing the importance of library automation, the respondents were asked about to their knowledge on open source library automation software and the collected data is tabulated in Table 2.

The analysis of data of Table 2 reveals that ISIS/CDS and KOHA is most popular OSS. It is followed by other OSS such as Library Management System, LMS, Koha, , PhpMyLibrary, and OpenBiblio respectively.

Table 2. Awareness of library Automation open source softwares amongst Library Professionals

Software	Known	Fully known	Partially known	Not known
CDS/ISIS	47 (57.31%)	33 (40.24%)	14 (17.07%)	35(42.68%)
KOHA	33 (40.24%)	18 (21.95%)	15(18.29%)	49(59.75%)
LMS	36 (43.90%)	23(28.04%)	13(15.85%)	46 (56.09%)
PhpMylibrary	10 (12.19%)	4(4.87%)	6(7.31%)	72(87.80%)
OpenBiblio	6 (7.31%)	2(2.43%)	4(4.87%)	76(92.68%)

AWARENESS OF DIGITAL LIBRARY OPEN SOURCE SOFTWARES

The new technologies implement of modern libraries are towards creation of digital library/institutional repositories. Many libraries are using OSS for their formation of library automation. Accordingly, the present study attempts to know about the respondents' knowledge

on these OSS. The data collected on this have been tabulated in Table 3.

Table 3. Awareness of digital library open source software amongst Library Professionals

Software	Known	Fully known	Partially known	Not known
DSpace	56 (68.29%)	26 (31.70%)	30 (36.58%)	26 (31.70%)
E-Prints	42 (51.21%)	27 (32.9%)	15 (18.29%)	40 (48.78%)
GSDL	23 (28.04%)	11(13.41%)	12 (14.63%)	59 (71.95%)
CDSware	7 (8.53%)	2 (2.43%)	5 (6.09%)	75 (91.46%)

METHODS OF OBTAINING KNOWLEDGE ON OSS

There are various methods of acquiring knowledge on OSS by the LIS professionals and data collected on this and been tabulated in Table 4.

Table 4. Methods of acquiring knowledge on OSS

Methods	No.of Responses	Percentage
From Colleagues /friends	21	25.60%
From Self Study	14	17.07%
Formal training / education	43	52.43%
Informal training / education	23	28.04%
Trial and error basis	36	43.90%

Data analyzed in Table 4 as high as 43 responses (52.43 %) indicates that the basic method of acquiring knowledge on OSS is formal education/training followed by other methods such as trial & error basis (43.90 %), informal education and training (28.04 %), from colleagues/friends (25.60 %) and self study (17.04 %).

UTILIZATION OF OPEN SOURCE OPERATING SYSTEM

Table 5. Reasons for not using OS operating system

Reason	No.of Responses	Percentage
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Less user-friendly	64	78.04%
Inadequate knowledge	31	37.80%
Use of commercial software	74	90.24%
Expert-dependent	51	62.19%
Feel Risk	63	76.82%

The analysis of data of Table 5 shows that out of 127 respondents replied negatively towards the use of OS operating system, all (90.24 %) favour commercial software. The other reasons stated by the respondents are feeling risk (76.82 %), less-user friendly (78.04 %), inadequate knowledge (37.80 %) and expert dependency (62.19 %).

FINDINGS & SUGGESTIONS

On the study of this paper the following suggestions have been made to enhance the use of OSS in Polytechnic college libraries by LIS professional's inTamilnadu.

- The Library professionals of Polytechnic college in Tamilnadu need to be more ICT sense and should possess a positive attitude with adequate knowledge on OSS through formal and informal training programs, so that they should be capable and confident in using OSS for various library applications.
- The OSS developers and experts need to play a vital role to make it popular among LIS professionals of Polytechnic colleges in Tamilnadu through the publications of good literature on OSS, organizing workshop /seminar on OSS, etc.
- Adequate training provision for LIS professionals of Polytechnic colleges in Tamilnadu need to be trained on OSS and its use in libraries.
- Although Library professionals in Tamilnadu have possess fair knowledge on different OSS, its use in Polytechnic college libraries is not up to the satisfactory level. Hence, the authorities of these libraries need to be cooperative towards LIS professionals and some autonomy must be given to them, so that they can improve their talent in using OSS comfortably.
- The OSS needs to introduce in the course curriculum of the Library courses of universities of Tamilnadu, so that the future LIS professionals will be well trained in using OSS in libraries.

CONCLUSION

Open source offers useful savings in time, money and resources. Large percentage of library professionals has recognized potential for OSS systems and applications. With exponential growth of information, user expectations are growing and more and more 'personalized' services are required by users and there is a great opportunity for librarians to play a leading role in organizing and presenting filtered information by making use of these OSS tools. However, OSS is not always easy to use and is therefore largely inaccessible to many libraries. The basic problem is that most OSS are written by programmers who do not understand the end-user needs and whose software is often complex and difficult to use. The paper finds that although the LIS professionals of Polytechnic colleges in Taminadu have knowledge on OSS, their uses in libraries are in budding stage. A cooperative and participatory organizational system, positive attitude of authorities and LIS professionals, and proper training provision for LIS professionals need to be developed for the widespread use of OSS in their libraries.

REFERENCES

1. Cervone, F. The open source option. *Library Journal Net Connect*, Summer 2003a, 8-12.
2. <http://sourceforeg.net>
3. Giri, R. & Sengar, D.S. Use of open source software in the learning resource center of Indira Gandhi Institute of Technology: A case study. *Annals Lib. Inf. Stud.*, 2011, **58**, 41-48.
4. Poulter, Alan. Open source in libraries: An introduction and overview. Vol.59, No.9,2010 p.655-61.
5. Bissels, G. Implementation of an open source library management system—experiences with Koha 3.0 at the Royal London Homoeopathic Hospital, open source software use in libraries 11. *Program*, 2008, **42**(3), 303-14.
6. Biswas, G & Paul, D. An evaluative study on the open source digital library software for institutional repository: Special reference to DSpace and greenstone digital library. *Inter. J. Lib. Inf. Sci.*, 2010, **2**(1), 1-10. <http://www.academicjournals.org/ijlis> (accessed on 25 September 2011).

7. Sunil Kumar satpathy and Rabindra K.Maharana. Awareness and Adoption of Open Source Software among LIS professionals of Engineering Colleges of Odisha. DESIDOC journal of Lib. & Information Tech. Vol.32. No.5, September 2012, pp 421-426.